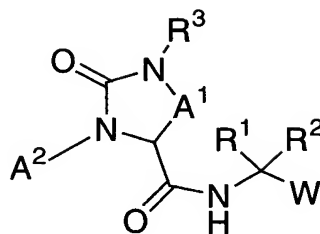


WHAT IS CLAIMED:

1. A compound of Formula (I):



(I)

or a stereoisomer, pharmaceutically acceptable salt form or prodrug thereof, wherein:

A¹ is C₁-C₃ alkylene substituted by 0-2 C₁-C₄ alkyl;

A² is -C(=O)R^{9b}, -S(=O)R^{9b}, -S(=O)₂R^{9b}, -CONHR^{9b},
-S(=O)₂NHR^{9b}, -C(=O)OR^{9b};
-A³-R^{9a};
-A³-A⁴-R^{9a};
-A³-A⁴-A⁵-R^{9a}; or
-A³-A⁴-A⁵-A⁶-R^{9a};

W is selected from the group:

-B(OR²⁶)(OR²⁷),
-C(=O)C(=O)-Q,
-C(=O)C(=O)NH-Q,
-C(=O)C(=O)-O-Q,
-C(=O)CF₂C(=O)NH-Q,
-C(=O)CF₃,
-C(=O)CF₂CF₃,
-C(=O)H, and
-C(=O)W¹;

W¹ is OR⁸ or -NR¹¹R^{11a};

Q is selected from the group:

-(CR¹⁰R^{10c})_m-Q¹,

5 -(CR¹⁰R^{10c})_m-Q²,

C₁-C₄ alkyl substituted with Q¹,

C₂-C₄ alkenyl substituted with Q¹,

C₂-C₄ alkynyl substituted with Q¹,

an amino acid residue,

10 -A⁷-A⁸, and

-A⁷-A⁸-A⁹;

m is 1, 2, 3, or 4;

15 Q¹ is selected from the group:

-CO₂R¹¹, -SO₂R¹¹, -SO₃R¹¹, -P(O)₂R¹¹, -P(O)₃R¹¹;

aryl substituted with 0-4 Q^{1a}; and

5-6 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the group:

20 O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-6 membered
heterocyclic group is substituted with 0-4 Q^{1a};

Q^{1a} is H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,

25 -CO₂R¹⁹, -C(=O)NR¹⁹R^{19a}, -NHC(=O)R¹⁹, -SO₂R¹⁹,

-SO₂NR¹⁹R^{19a}, -NR¹⁹R^{19a}, -OR¹⁹, -SR¹⁹, C₁-C₄ alkyl,

C₁-C₄ alkoxy, C₁-C₄ haloalkyl, or C₁-C₄ haloalkoxy;

Q² is -X-NR¹²-Z, -NR¹²-Y-Z, or -X-NR¹²-Y-Z;

30

/ X is -C(=O)-, -S-, -S(=O)-, -S(=O)₂-, -P(O)-, -P(O)₂-, or
-P(O)₃-;

/ Y is -C(=O)-, -S-, -S(=O)-, -S(=O)₂-, -P(O)-, -P(O)₂-, or
5 -P(O)₃-;

/ Z is selected from the group:

C₁-C₄ haloalkyl;

C₁-C₄ alkyl substituted with 0-3 Z^a;

10 C₂-C₄ alkenyl substituted with 0-3 Z^a;

C₂-C₄ alkynyl substituted with 0-3 Z^a;

C₃-C₁₀ cycloalkyl substituted with 0-5 Z^b;

aryl substituted with 0-5 Z^b;

5-10 membered heterocyclic group consisting of carbon
15 atoms and 1-4 heteroatoms selected from the group:

O, S, and N; optionally saturated, partially

unsaturated or unsaturated; and said 5-10 membered

heterocyclic group is substituted with 0-4 Z^b;

an amino acid residue;

20 -A⁷-A⁸, and

-A⁷-A⁸-A⁹;

/ Z^a is selected from the group:

H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,

25 -CO₂R²⁰, -C(=O)NR²⁰R^{20a}, -NHC(=O)R²⁰, -NR²⁰R^{20a},

-OR²⁰, -SR²⁰, -S(=O)R²⁰, -SO₂R²⁰, -SO₂NR²⁰R^{20a}, C₁-C₄
alkyl, C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy;

C₃-C₁₀ cycloalkyl substituted with 0-5 Z^b;

C₃-C₁₀ carbocycle substituted with 0-5 Z^b;

30 aryl substituted with 0-5 Z^b; and

5-10 membered heterocyclic group consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-10 membered heterocyclic group is substituted with 0-4 Z^b;

/ Z^b is selected from the group:

H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,
-CO₂R²⁰, -C(=O)NR²⁰R^{20a}, -NHC(=O)R²⁰, -NR²⁰R^{20a},
10 -OR²⁰, -SR²⁰, -S(=O)R²⁰, -SO₂R²⁰, -SO₂NR²⁰R^{20a}, C₁-C₄
alkyl, C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy;
C₃-C₁₀ cycloalkyl substituted with 0-5 Z^c;
C₃-C₁₀ carbocycle substituted with 0-5 Z^c;
aryl substituted with 0-5 Z^c; and

15 5-10 membered heterocyclic group consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-10 membered heterocyclic group is substituted with 0-4 Z^c;

20 / Z^c is H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,
-CO₂R²⁰, -C(=O)NR²⁰R^{20a}, -NHC(=O)R²⁰, -NR²⁰R^{20a},
-OR²⁰, -SR²⁰, -S(=O)R²⁰, -SO₂R²⁰, -SO₂NR²⁰R^{20a}, C₁-C₄
alkyl, C₁-C₄ haloalkyl, or C₁-C₄ haloalkoxy;

25 / R¹ is selected from the group: H, F;

C₁-C₆ alkyl substituted with 0-3 R^{1a};
C₂-C₆ alkenyl substituted with 0-3 R^{1a};
C₂-C₆ alkynyl substituted with 0-3 R^{1a}; and
30 C₃-C₆ cycloalkyl substituted with 0-3 R^{1a};

/R^{1a} is selected at each occurrence from the group:

Cl, F, Br, I, CF₃, CHF₂, OH, =O, SH, -CO₂R^{1b}, -SO₂R^{1b},
-SO₃R^{1b}, -P(O)₂R^{1b}, -P(O)₃R^{1b}, -C(=O)NHR^{1b},
5 -NHC(=O)R^{1b}, -SO₂NHR^{1b}, -OR^{1b}, -SR^{1b}, C₃-C₆
cycloalkyl, C₁-C₆ alkoxy, -S-(C₁-C₆ alkyl);
C₁-C₄ alkyl substituted with 0-3 R^{1c};
aryl substituted with 0-5 R^{1c};
-O-(CH₂)_n-aryl substituted with 0-5 R^{1c};
10 -S-(CH₂)_n-aryl substituted with 0-5 R^{1c}; and
5-10 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the group:
O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
15 heterocyclic group is substituted with 0-3 R^{1c};

/n is 0, 1 or 2;

/ R^{1b} is H;

20 C₁-C₄ alkyl substituted with 0-3 R^{1c};
C₂-C₄ alkenyl substituted with 0-3 R^{1c};
C₂-C₄ alkynyl substituted with 0-3 R^{1c};
C₃-C₆ cycloalkyl substituted with 0-5 R^{1c};
aryl substituted with 0-5 R^{1c};
25 aryl-C₁-C₄ alkyl substituted with 0-4 R^{1c}; or
5-6 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the group:
O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
30 heterocyclic group is substituted with 0-4 R^{1c};

/ R^{1c} is selected at each occurrence from the group:

C₁-C₄ alkyl, Cl, F, Br, I, OH, SH, -CN, -NO₂, -OR^{1d},
-C(=O)OR^{1d}, -NR^{1d}R^{1d}, -SO₂R^{1d}, -SO₃R^{1d}, -C(=O)NHR^{1d},
5 -NHC(=O)R^{1d}, -SO₂NHR^{1d}, -CF₃, -OCF₃, C₃-C₆ cycloalkyl,
phenyl, and benzyl;

/ R^{1d} is selected at each occurrence from the group: H, C₁-C₄
alkyl, phenyl and benzyl;

10

/ R² is selected from the group: H, C₁-C₄ alkyl, C₂-C₄
alkenyl, C₂-C₄ alkynyl, C₃-C₄ cycloalkyl, and C₃-C₄
cycloalkyl(C₁-C₄ alkyl)-;

15 / alternatively, R¹ and R² can be combined to form a 4-7
membered cyclic group consisting of carbon atoms;
substituted with 0-2 R¹⁴;

/ R³ is selected from the group: R⁴,

20 - (CH₂)_p-NH-R⁴,
- (CH₂)_p-NHC(=O)-R⁴,
- (CH₂)_p-C(=O)NH-R⁴,
- (CH₂)_p-C(=O)O-R⁴,
- (CH₂)_p-C(=O)C(=O)-R⁴,
25 - (CH₂)_p-C(=O)C(=O)NH-R⁴,
- (CH₂)_p-NHC(=O)NH-R⁴,
- (CH₂)_p-NHC(=O)NHC(=O)-R⁴,
- (CH₂)_p-NHS(=O)₂-R⁴,
- (CH₂)_p-S(=O)₂NH-R⁴,

$-(CH_2)_p-C(=O)-R^4$,
 $-(CH_2)_p-O-R^4$, and
 $-(CH_2)_p-S-R^4$;

5 /p is 0, 1, or 2;

/ R⁴ is selected from the group:

- C₁-C₆ alkyl substituted with 0-3 R^{4a};
- C₂-C₆ alkenyl substituted with 0-3 R^{4a};
- 10 C₂-C₆ alkynyl substituted with 0-3 R^{4a};
- C₃-C₁₀ cycloalkyl substituted with 0-4 R^{4b};
- C₃-C₁₀ carbocycle substituted with 0-4 R^{4b};
- aryl substituted with 0-5 R^{4b};
- aryl-C₁-C₄ alkyl substituted with 0-5 R^{4b}; and
- 15 5-10 membered heterocyclic group consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-10 membered heterocyclic group is substituted
- 20 with 0-4 R^{4b};

/ R^{4a} is, at each occurrence, independently selected from:
 H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,
 =O, OH, -CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a},
 25 -NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},
 -S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a}, -NHC(=NH)NHR¹¹,
 -C(=NH)NHR¹¹, =NOR¹¹, -NR¹¹C(=O)OR^{11a},
 -NR¹¹C(=O)NR¹¹R^{11a}, -NR¹¹SO₂NR¹¹R^{11a}, -NR¹¹SO₂R^{11a},
 -OP(O)(OR¹¹)₂;

C₁-C₄ alkyl substituted with 0-3 R^{4b};
 C₂-C₄ alkenyl substituted with 0-3 R^{4b};
 C₂-C₄ alkynyl substituted with 0-3 R^{4b};
 C₃-C₇ cycloalkyl substituted with 0-4 R^{4c};
 5 C₃-C₁₀ carbocycle substituted with 0-4 R^{4c};
 aryl substituted with 0-5 R^{4c}; and
 5-10 membered heterocyclic group consisting of carbon
 atoms and 1-4 heteroatoms selected from the
 group: O, S, and N; optionally saturated,
 10 partially unsaturated or unsaturated; and said 5-
 10 membered heterocyclic group is substituted
 with 0-3 R^{4c};

/R^{4b} is, at each occurrence, independently selected from:
 15 H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH,
 -CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a},
 -NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},
 -S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a}, -NHC(=NH)NHR¹¹,
 -C(=NH)NHR¹¹, =NOR¹¹, -NR¹¹C(=O)OR^{11a},
 20 -OC(=O)NR¹¹R^{11a}, -NR¹¹C(=O)NR¹¹R^{11a}, -NR¹¹SO₂NR¹¹R^{11a},
 -NR¹¹SO₂R^{11a}, -OP(O)(OR¹¹)₂;

C₁-C₄ alkyl substituted with 0-3 R^{4c};
 C₂-C₄ alkenyl substituted with 0-3 R^{4c};
 C₂-C₄ alkynyl substituted with 0-3 R^{4c};
 25 C₃-C₆ cycloalkyl substituted with 0-4 R^{4d};
 aryl substituted with 0-5 R^{4d}; and
 5-10 membered heterocyclic group consisting of carbon
 atoms and 1-4 heteroatoms selected from the
 group: O, S, and N; optionally saturated or

unsaturated; and said 5-10 membered heterocyclic group is substituted with 0-3 R^{4d};

/ R^{4c} is, at each occurrence, independently selected from:

- 5 H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH, -CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a}, -NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a}, -S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a}, C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy;
- 10 C₁-C₄ alkyl substituted with 0-3 R^{4d};
C₂-C₄ alkenyl substituted with 0-3 R^{4d};
C₂-C₄ alkynyl substituted with 0-3 R^{4d};
C₃-C₆ cycloalkyl substituted with 0-4 R^{4d};
aryl substituted with 0-5 R^{4d}; and
- 15 5-10 membered heterocyclic group consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated or unsaturated; and said 5-10 membered heterocyclic group is substituted with 0-3 R^{4d};

20

/ R^{4d} is, at each occurrence, independently selected from:

- H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH, -CO₂H, -CO₂R¹¹, -C(=O)NR¹¹R^{11a}, -NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a}, -S(=O)R^{11a},
- 25 -SO₂R¹¹, -SO₂NR¹¹R^{11a}, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy, phenyl, and benzyl;

/ R⁸ is H or C₁-C₄ alkyl;

R^{9a} is selected from the group: H, $-S(=O)R^{9b}$, $-S(=O)_2R^{9b}$,
 $-S(=O)_2NHR^{9b}$, $-C(=O)R^{9b}$, $-C(=O)OR^{9b}$, $-C(=O)NHR^{9b}$,
 $-C(=O)NHC(=O)R^{9b}$;
C₁-C₆ alkyl substituted with 0-3 R^{9c} ;
5 C₂-C₆ alkenyl substituted with 0-3 R^{9c} ;
C₂-C₆ alkynyl substituted with 0-3 R^{9c} ;
C₃-C₆ cycloalkyl substituted with 0-3 R^{9d} ;
C₃-C₁₄ carbocycle substituted with 0-4 R^{9d} ;
aryl substituted with 0-5 R^{9d} ; and
10 5-10 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the group:
O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
heterocyclic group is substituted with 0-4 R^{9d} ;
15
 R^{9b} is selected from the group: H;
C₁-C₆ alkyl substituted with 0-3 R^{9c} ;
C₂-C₆ alkenyl substituted with 0-3 R^{9c} ;
C₂-C₆ alkynyl substituted with 0-3 R^{9c} ;
20 C₃-C₆ cycloalkyl substituted with 0-3 R^{9d} ;
C₃-C₁₄ carbocycle substituted with 0-4 R^{9d} ;
aryl substituted with 0-5 R^{9d} ; and
5-10 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the group:
25 O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
heterocyclic group is substituted with 0-4 R^{9d} ;

/ R^{9c} is selected from the group: CF₃, OCF₃, Cl, F, Br, I,
=O, OH, C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂, -CN, NO₂;

C₁-C₆ alkyl substituted with 0-3 R^{9d};

C₂-C₆ alkenyl substituted with 0-3 R^{9d};

5 C₂-C₆ alkynyl substituted with 0-3 R^{9d};

C₃-C₆ cycloalkyl substituted with 0-3 R^{9e};

C₃-C₁₄ carbocycle substituted with 0-4 R^{9e};

aryl substituted with 0-5 R^{9e}; and

10 5-10 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the group:
O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
heterocyclic group is substituted with 0-4 R^{9e};

15 / R^{9d} is selected at each occurrence from the group:

CF₃, OCF₃, Cl, F, Br, I, =O, OH, C(O)OR¹¹, NH₂,
NH(CH₃), N(CH₃)₂, -CN, NO₂;

C₁-C₄ alkyl substituted with 0-3 R^{9e};

C₁-C₄ alkoxy substituted with 0-3 R^{9e};

20 C₃-C₆ cycloalkyl substituted with 0-3 R^{9e};

aryl substituted with 0-5 R^{9e}; and

5-6 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated,
25 partially unsaturated or unsaturated; and said
5-6 membered heterocyclic group is substituted
with 0-4 R^{9e};

/ R^{9e} is selected at each occurrence from the group:

C₁-C₄ alkyl, C₁-C₄ alkoxy, CF₃, OCF₃, Cl, F, Br, I,
=O, OH, phenyl, C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂,
-CN, and NO₂;

5 / R¹⁰ is selected from the group: -CO₂R¹¹, -NR¹¹R^{11a}, and C₁-
C₆ alkyl substituted with 0-1 R^{10a};

/ R^{10a} is selected from the group: halo, -NO₂, -CN, -CF₃,
-CO₂R¹¹, -NR¹¹R^{11a}, -OR¹¹, -SR¹¹, -C(=NH)NH₂, and aryl
10 substituted with 0-1 R^{10b};

/ R^{10b} is selected from the group: -CO₂H, - NH₂, -OH, -SH,
and -C(=NH)NH₂;

15 / R^{10c} is H or C₁-C₄ alkyl;

/ alternatively, R¹⁰ and R^{10c} can be combined to form a C₃-C₆
cycloalkyl group substituted with 0-1 R^{10a};

20 / R¹¹ and R^{11a} are, at each occurrence, independently
selected from the group: H;

C₁-C₆ alkyl substituted with 0-3 R^{11b};

C₂-C₆ alkenyl substituted with 0-3 R^{11b};

C₂-C₆ alkynyl substituted with 0-3 R^{11b};

25 C₃-C₇ cycloalkyl substituted with 0-3 R^{11b};

aryl substituted with 0-3 R^{11b}; and

aryl(C₁-C₄ alkyl)- substituted with 0-3 R^{11b};

/ R^{11b} is OH, C₁-C₄ alkoxy, F, Cl, Br, I, NH₂, or -NH(C₁-C₄ alkyl);

/ R¹² is H or C₁-C₄ alkyl;

5

/ R¹⁴ is C₁-C₄ alkyl or C₂-C₄ alkenyl;

/ R¹⁹ and R^{19a} are independently selected from the group: H, C₁-C₄ alkyl, C₁-C₄ haloalkyl, aryl, aryl(C₁-C₄ alkyl),
10 C₃-C₆ cycloalkyl, and C₃-C₆ cycloalkyl(C₁-C₄ alkyl);

/ alternatively, NR¹⁹R^{19a} may form a 5-6 membered heterocyclic group consisting of carbon atoms, a nitrogen atom, and optionally a second heteroatom
15 selected from the group: O, S, and N;

/ R²⁰ and R^{20a} are independently selected from the group: H, C₁-C₄ alkyl, C₁-C₄ haloalkyl, aryl, aryl(C₁-C₄ alkyl)-, C₃-C₆ cycloalkyl, and
20 C₃-C₆ cycloalkyl(C₁-C₄ alkyl)-;

/ alternatively, NR²⁰R^{20a} may form a 5-6 membered heterocyclic group consisting of carbon atoms, a nitrogen atom, and optionally a second heteroatom
25 selected from the group: O, S, and N;

/ OR²⁶ and OR²⁷ are independently selected from:
a) -OH,
b) -F,
30 c) -NR²⁸R²⁹,
d) C₁-C₈ alkoxy, and

/when taken together, OR²⁶ and OR²⁷ form:

- 5 e) a cyclic boronic ester where said cyclic boronic ester contains from 2 to 20 carbon atoms, and, optionally, 1, 2, or 3 heteroatoms which can be N, S, or O;
- f) a cyclic boronic amide where said boronic amide contains from 2 to 20 carbon atoms and, optionally, 1, 2, or 3 heteroatoms which can be N, S, or O; or
- 10 g) a cyclic boronic amide-ester where said boronic amide-ester contains from 2 to 20 carbon atoms and, optionally, 1, 2, or 3 heteroatoms which can be N, S, or O;

/R²⁸ and R²⁹, are independently selected from: H, C₁-C₄
15 alkyl, aryl(C₁-C₄ alkyl)-, and C₃-C₇ cycloalkyl;

/A³, A⁴, A⁵, A⁶, A⁷, A⁸, and A⁹ are independently selected from an amino acid residue; and

20 an amino acid residue, at each occurrence, independently comprises a natural amino acid, a modified amino acid or an unnatural amino acid wherein said natural, modified or unnatural amino acid is of either D or L configuration.

25

2. A compound of Claim 1, or a stereoisomer, pharmaceutically acceptable salt form or prodrug thereof, wherein:

30 A¹ is -CH₂- or -CH₂CH₂-;

A² is -C(=O)R^{9b}, -S(=O)R^{9b}, -S(=O)₂R^{9b}, -CONHR^{9b},

-S(=O)₂NHR^{9b}, -C(=O)OR^{9b};

-A³-R^{9a};

-A³-A⁴-R^{9a};

-A³-A⁴-A⁵-R^{9a}; or

5 -A³-A⁴-A⁵-A⁶-R^{9a};

W is selected from the group:

-B(OR²⁶)(OR²⁷),

-C(=O)C(=O)-Q,

10 -C(=O)C(=O)NH-Q,

-C(=O)C(=O)-O-Q,

-C(=O)CF₂C(=O)NH-Q,

-C(=O)CF₃,

-C(=O)CF₂CF₃,

15 -C(=O)H, and

-C(=O)W¹;

W¹ is OR⁸ or -NR¹¹R^{11a};

20 Q is selected from the group:

-(CR¹⁰R^{10c})_m-Q¹,

C₁-C₄ alkyl substituted with Q¹,

C₂-C₄ alkenyl substituted with Q¹, and

C₂-C₄ alkynyl substituted with Q¹;

25

m is 1 or 2;

Q¹ is selected from the group:

-CO₂R¹¹, -SO₂R¹¹, -SO₃R¹¹, -P(O)₂R¹¹, -P(O)₃R¹¹;

30 phenyl substituted with 0-4 Q^{1a}; and

5-6 membered heterocyclic group consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-6 membered heterocyclic group is substituted with 0-4 Q^{1a};

Q^{1a} is H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, -CO₂R¹⁹, -C(=O)NR¹⁹R^{19a}, -NHC(=O)R¹⁹, -SO₂R¹⁹, -SO₂NR¹⁹R^{19a}, -NR¹⁹R^{19a}, -OR¹⁹, -SR¹⁹, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ haloalkyl, or C₁-C₄ haloalkoxy;

R¹ is selected from the group: H, F; C₁-C₆ alkyl substituted with 0-3 R^{1a}; C₂-C₆ alkenyl substituted with 0-3 R^{1a}; C₂-C₆ alkynyl substituted with 0-3 R^{1a}; and C₃-C₆ cycloalkyl substituted with 0-3 R^{1a};

R^{1a} is selected at each occurrence from the group: Cl, F, Br, I, CF₃, CHF₂, OH, =O, SH, -CO₂R^{1b}, -SO₂R^{1b}, -SO₃R^{1b}, -P(O)₂R^{1b}, -P(O)₃R^{1b}, -C(=O)NHR^{1b}, -NHC(=O)R^{1b}, -SO₂NHR^{1b}, -OR^{1b}, -SR^{1b}, C₃-C₆ cycloalkyl, C₁-C₆ alkoxy, -S-(C₁-C₆ alkyl); C₁-C₄ alkyl substituted with 0-3 R^{1c}; aryl substituted with 0-5 R^{1c}; -O-(CH₂)_n-aryl substituted with 0-5 R^{1c}; -S-(CH₂)_n-aryl substituted with 0-5 R^{1c}; and 5-10 membered heterocyclic group consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially

unsaturated or unsaturated; and said 5-10 membered
heterocyclic group is substituted with 0-3 R^{1c};

n is 0, 1 or 2;

5

R^{1b} is H;

C₁-C₄ alkyl substituted with 0-3 R^{1c};

C₂-C₄ alkenyl substituted with 0-3 R^{1c};

C₂-C₄ alkynyl substituted with 0-3 R^{1c};

10 C₃-C₆ cycloalkyl substituted with 0-5 R^{1c};

aryl substituted with 0-5 R^{1c};

aryl-C₁-C₄ alkyl substituted with 0-4 R^{1c}; or

5-6 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the group:

15 O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
heterocyclic group is substituted with 0-4 R^{1c};

R^{1c} is selected at each occurrence from the group:

20 C₁-C₄ alkyl, Cl, F, Br, I, OH, SH, -CN, -NO₂, -OR^{1d},
-C(=O)OR^{1d}, -NR^{1d}R^{1d}, -SO₂R^{1d}, -SO₃R^{1d}, -C(=O)NHR^{1d},
-NHC(=O)R^{1d}, -SO₂NHR^{1d}, -CF₃, -OCF₃, C₃-C₆ cycloalkyl,
phenyl, and benzyl;

25 R^{1d} is selected at each occurrence from the group: H, C₁-C₄
alkyl, phenyl and benzyl;

R² is selected from the group: H, C₁-C₄ alkyl, C₂-C₄
alkenyl, C₂-C₄ alkynyl, C₃-C₄ cycloalkyl, and C₃-C₄
30 cycloalkyl(C₁-C₄ alkyl)-;

alternatively, R^1 and R^2 can be combined to form a 4-7
membered cyclic group consisting of carbon atoms;
substituted with 0-2 R^{14} ;

5

R^3 is selected from the group: R^4 ,

$-(CH_2)_p-NH-R^4$,

$-(CH_2)_p-NHC(=O)-R^4$,

$-(CH_2)_p-C(=O)NH-R^4$,

10 $-(CH_2)_p-C(=O)O-R^4$,

$-(CH_2)_p-C(=O)C(=O)-R^4$,

$-(CH_2)_p-C(=O)C(=O)NH-R^4$,

$-(CH_2)_p-NHC(=O)NH-R^4$,

$-(CH_2)_p-NHC(=O)NHC(=O)-R^4$,

15 $-(CH_2)_p-NHS(=O)_2-R^4$,

$-(CH_2)_p-S(=O)_2NH-R^4$,

$-(CH_2)_p-C(=O)-R^4$,

$-(CH_2)_p-O-R^4$, and

$-(CH_2)_p-S-R^4$;

20

p is 0, 1, or 2;

R^4 is selected from the group:

C_1-C_6 alkyl substituted with 0-3 R^{4a} ;

25 C_2-C_6 alkenyl substituted with 0-3 R^{4a} ;

C_2-C_6 alkynyl substituted with 0-3 R^{4a} ;

C_3-C_{10} cycloalkyl substituted with 0-4 R^{4b} ;

C_3-C_{10} carbocycle substituted with 0-4 R^{4b} ;

aryl substituted with 0-5 R^{4b};
aryl-C₁-C₄ alkyl substituted with 0-5 R^{4b}; and
5-10 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated,
partially unsaturated or unsaturated; and said 5-
10 membered heterocyclic group is substituted
with 0-3 R^{4b};

10 R^{4a} is, at each occurrence, independently selected from:

H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,
=O, OH, -CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a},
-NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},
-S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a}, -NHC(=NH)NHR¹¹,
15 -C(=NH)NHR¹¹, =NOR¹¹, -NR¹¹C(=O)OR^{11a},
-NR¹¹C(=O)NR¹¹R^{11a}, -NR¹¹SO₂NR¹¹R^{11a}, -NR¹¹SO₂R^{11a},
-OP(O)(OR¹¹)₂;

C₁-C₄ alkyl substituted with 0-3 R^{4b};

C₂-C₄ alkenyl substituted with 0-3 R^{4b};

20 C₂-C₄ alkynyl substituted with 0-3 R^{4b};

C₃-C₇ cycloalkyl substituted with 0-4 R^{4c};

C₃-C₁₀ carbocycle substituted with 0-4 R^{4c};

aryl substituted with 0-5 R^{4c}; and

5-10 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated,
partially unsaturated or unsaturated; and said 5-
10 membered heterocyclic group is substituted
with 0-3 R^{4c};

- R^{4b} is, at each occurrence, independently selected from:
H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH,
-CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a},
-NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},
5 -S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a}, -NHC(=NH)NHR¹¹,
-C(=NH)NHR¹¹, =NOR¹¹, -NR¹¹C(=O)OR^{11a},
-OC(=O)NR¹¹R^{11a}, -NR¹¹C(=O)NR¹¹R^{11a}, -NR¹¹SO₂NR¹¹R^{11a},
-NR¹¹SO₂R^{11a}, -OP(O)(OR¹¹)₂;
C₁-C₄ alkyl substituted with 0-3 R^{4c};
10 C₂-C₄ alkenyl substituted with 0-3 R^{4c};
C₂-C₄ alkynyl substituted with 0-3 R^{4c};
C₃-C₆ cycloalkyl substituted with 0-4 R^{4d};
aryl substituted with 0-5 R^{4d}; and
5-10 membered heterocyclic group consisting of carbon
15 atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated or
unsaturated; and said 5-10 membered heterocyclic
group is substituted with 0-3 R^{4d};
- 20 R^{4c} is, at each occurrence, independently selected from:
H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH,
-CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a},
-NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},
-S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a},
25 C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy;
C₁-C₄ alkyl substituted with 0-3 R^{4d};
C₂-C₄ alkenyl substituted with 0-3 R^{4d};
C₂-C₄ alkynyl substituted with 0-3 R^{4d};
C₃-C₆ cycloalkyl substituted with 0-4 R^{4d};

aryl substituted with 0-5 R^{4d}; and
 5-10 membered heterocyclic group consisting of carbon
 atoms and 1-4 heteroatoms selected from the
 group: O, S, and N; optionally saturated or
 5 unsaturated; and said 5-10 membered heterocyclic
 group is substituted with 0-3 R^{4d};

R^{4d} is, at each occurrence, independently selected from:
 H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH,
 10 -CO₂H, -CO₂R¹¹, -C(=O)NR¹¹R^{11a}, -NHC(=O)R¹¹,
 -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a}, -S(=O)R^{11a},
 -SO₂R¹¹, -SO₂NR¹¹R^{11a}, C₁-C₄ alkyl, C₁-C₄ alkoxy,
 C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy, phenyl, and benzyl;

15 R⁸ is H or C₁-C₄ alkyl;

R^{9a} is selected from the group: H, -S(=O)R^{9b}, -S(=O)₂R^{9b},
 -S(=O)₂NHR^{9b}, -C(=O)R^{9b}, -C(=O)OR^{9b}, -C(=O)NHR^{9b},
 -C(=O)NHC(=O)R^{9b};
 20 C₁-C₆ alkyl substituted with 0-3 R^{9c};
 C₂-C₆ alkenyl substituted with 0-3 R^{9c};
 C₂-C₆ alkynyl substituted with 0-3 R^{9c};
 C₃-C₆ cycloalkyl substituted with 0-3 R^{9d};
 C₃-C₁₄ carbocycle substituted with 0-4 R^{9d};
 25 aryl substituted with 0-5 R^{9d}; and
 5-10 membered heterocyclic group consisting of carbon
 atoms and 1-4 heteroatoms selected from the group:
 O, S, and N; optionally saturated, partially
 unsaturated or unsaturated; and said 5-10 membered
 30 heterocyclic group is substituted with 0-4 R^{9d};

- R^{9b} is selected from the group: H;
 C₁-C₆ alkyl substituted with 0-3 R^{9c} ;
 C₂-C₆ alkenyl substituted with 0-3 R^{9c} ;
 5 C₂-C₆ alkynyl substituted with 0-3 R^{9c} ;
 C₃-C₆ cycloalkyl substituted with 0-3 R^{9d} ;
 C₃-C₁₄ carbocycle substituted with 0-4 R^{9d} ;
 aryl substituted with 0-5 R^{9d} ; and
 5-10 membered heterocyclic group consisting of carbon
 10 atoms and 1-4 heteroatoms selected from the group:
 O, S, and N; optionally saturated, partially
 unsaturated or unsaturated; and said 5-10 membered
 heterocyclic group is substituted with 0-4 R^{9d} ;
- 15 R^{9c} is selected from the group: CF₃, OCF₃, Cl, F, Br, I,
 =O, OH, C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂, -CN, NO₂;
 C₁-C₆ alkyl substituted with 0-3 R^{9d} ;
 C₂-C₆ alkenyl substituted with 0-3 R^{9d} ;
 C₂-C₆ alkynyl substituted with 0-3 R^{9d} ;
 20 C₃-C₆ cycloalkyl substituted with 0-3 R^{9e} ;
 C₃-C₁₄ carbocycle substituted with 0-4 R^{9e} ;
 aryl substituted with 0-5 R^{9e} ; and
 5-10 membered heterocyclic group consisting of carbon
 atoms and 1-4 heteroatoms selected from the group:
 25 O, S, and N; optionally saturated, partially
 unsaturated or unsaturated; and said 5-10 membered
 heterocyclic group is substituted with 0-4 R^{9e} ;

R^{9d} is selected at each occurrence from the group:

CF₃, OCF₃, Cl, F, Br, I, =O, OH, C(O)OR¹¹, NH₂,
NH(CH₃), N(CH₃)₂, -CN, NO₂;

C₁-C₄ alkyl substituted with 0-3 R^{9e};

C₁-C₄ alkoxy substituted with 0-3 R^{9e};

5 C₃-C₆ cycloalkyl substituted with 0-3 R^{9e};

aryl substituted with 0-5 R^{9e}; and

5-6 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated,
10 partially unsaturated or unsaturated; and said
5-6 membered heterocyclic group is substituted
with 0-4 R^{9e};

R^{9e} is selected at each occurrence from the group:

15 C₁-C₄ alkyl, C₁-C₄ alkoxy, CF₃, OCF₃, Cl, F, Br, I,
=O, OH, phenyl, C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂,
-CN, and NO₂;

R¹⁰ is selected from the group: -CO₂R¹¹, -NR¹¹R^{11a}, and C₁-

20 C₆ alkyl substituted with 0-1 R^{10a};

R^{10a} is selected from the group: halo, -NO₂, -CN, -CF₃,

-CO₂R¹¹, -NR¹¹R^{11a}, -OR¹¹, -SR¹¹, -C(=NH)NH₂, and aryl
substituted with 0-1 R^{10b};

25

R^{10b} is selected from the group: -CO₂H, -NH₂, -OH, -SH,
and -C(=NH)NH₂;

R^{10c} is H or C₁-C₄ alkyl;

30

alternatively, R¹⁰ and R^{10c} can be combined to form a C₃-C₆
cycloalkyl group substituted with 0-1 R^{10a};

R¹¹ and R^{11a} are, at each occurrence, independently
5 selected from the group: H;
C₁-C₆ alkyl substituted with 0-3 R^{11b};
C₂-C₆ alkenyl substituted with 0-3 R^{11b};
C₂-C₆ alkynyl substituted with 0-3 R^{11b};
C₃-C₇ cycloalkyl substituted with 0-3 R^{11b};
10 aryl substituted with 0-3 R^{11b}; and
aryl(C₁-C₄ alkyl)- substituted with 0-3 R^{11b};

R^{11b} is OH, C₁-C₄ alkoxy, F, Cl, Br, I, NH₂, or -NH(C₁-C₄
alkyl);

15 R¹² is H or C₁-C₄ alkyl;

R¹⁴ is C₁-C₄ alkyl or C₂-C₄ alkenyl;

20 R¹⁹ and R^{19a} are independently selected from the group: H,
C₁-C₄ alkyl, C₁-C₄ haloalkyl, aryl, aryl(C₁-C₄ alkyl),
C₃-C₆ cycloalkyl, and C₃-C₆ cycloalkyl(C₁-C₄ alkyl);

alternatively, NR¹⁹R^{19a} may form a 5-6 membered
25 heterocyclic group consisting of carbon atoms, a
nitrogen atom, and optionally a second heteroatom
selected from the group: O, S, and N;

OR²⁶ and OR²⁷ are independently selected from:
30 a) -OH,

b) -F,

c) -NR²⁸R²⁹,

d) C₁-C₈ alkoxy, and

when taken together, OR²⁶ and OR²⁷ form:

5 e) a cyclic boronic ester where said cyclic boronic ester contains from 2 to 20 carbon atoms, and, optionally, 1, 2, or 3 heteroatoms which can be N, S, or O;

10 R²⁸ and R²⁹, are independently selected from: H, C₁-C₄ alkyl, aryl(C₁-C₄ alkyl)-, and C₃-C₇ cycloalkyl;

A³, A⁴, A⁵, and A⁶, are independently selected from an amino acid residue; and

15 an amino acid residue, at each occurrence, independently comprises a natural amino acid, a modified amino acid or an unnatural amino acid wherein said natural, modified or unnatural amino acid is of either D or L
20 configuration.

3. A compound of Claim 2, or a stereoisomer, pharmaceutically acceptable salt form or prodrug thereof, wherein:

25 A¹ is -CH₂- or -CH₂CH₂-;

A² is -C(=O)R^{9b}, -S(=O)R^{9b}, -S(=O)₂R^{9b}, -CONHR^{9b},
-S(=O)₂NHR^{9b}, -C(=O)OR^{9b};
30 -A³-R^{9a},
-A³-A⁴-R^{9a}; or

-A³-A⁴-A⁵-R^{9a};

W is -B(OR²⁶)(OR²⁷);

5 R¹ is selected from the group: H;

C₁-C₄ alkyl substituted with 0-2 R^{1a};

C₂-C₄ alkenyl substituted with 0-2 R^{1a};

C₂-C₄ alkynyl substituted with 0-2 R^{1a}; and

10 R^{1a} is selected at each occurrence from the group:

Cl, F, Br, CF₃, CHF₂, OH, C₃-C₆ cycloalkyl, C₁-C₄ alkoxy, -S-(C₁-C₄ alkyl);

C₁-C₄ alkyl substituted with 0-2 R^{1c};

aryl substituted with 0-3 R^{1c}; and

15 5-10 membered heterocyclic group consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-10 membered heterocyclic group is substituted with 0-3 R^{1c};

20

R^{1c} is selected at each occurrence from the group:

C₁-C₄ alkyl, Cl, F, Br, I, OH, SH, -CN, -NO₂, -OR^{1d},

-C(=O)OR^{1d}, -NR^{1d}R^{1d}, -SO₂R^{1d}, -SO₃R^{1d}, -C(=O)NHR^{1d},

-NHC(=O)R^{1d}, -SO₂NHR^{1d}, -CF₃, -OCF₃, C₃-C₆ cycloalkyl,

25 phenyl, and benzyl;

R^{1d} is selected at each occurrence from the group: H, C₁-C₄ alkyl, phenyl and benzyl;

30 R² is H or C₁-C₄ alkyl;

R³ is selected from the group: R⁴,

- (CH₂)_p-NH-R⁴,
- (CH₂)_p-NHC(=O)-R⁴,
- 5 - (CH₂)_p-C(=O)NH-R⁴,
- (CH₂)_p-C(=O)O-R⁴,
- (CH₂)_p-NHC(=O)NH-R⁴,
- (CH₂)_p-NHC(=O)NHC(=O)-R⁴,
- (CH₂)_p-C(=O)-R⁴,
- 10 - (CH₂)_p-O-R⁴, and
- (CH₂)_p-S-R⁴;

p is 0, 1, or 2;

15 R⁴ is selected from the group:

- C₁-C₄ alkyl substituted with 0-3 R^{4a};
- C₂-C₄ alkenyl substituted with 0-3 R^{4a};
- C₂-C₄ alkynyl substituted with 0-3 R^{4a};
- C₃-C₆ cycloalkyl substituted with 0-2 R^{4b};
- 20 aryl substituted with 0-5 R^{4b}; and
- 5-10 membered heterocyclic group consisting of carbon atoms and 1-4 heteroatoms selected from the group: O, S, and N; optionally saturated, partially unsaturated or unsaturated; and said 5-
- 25 10 membered heterocyclic group is substituted with 0-4 R^{4b};

R^{4a} is, at each occurrence, independently selected from:

H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃,

=O, OH, -CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a},
 -NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},
 -S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a}, -NHC(=NH)NHR¹¹,
 -C(=NH)NHR¹¹, =NOR¹¹, -NR¹¹C(=O)OR^{11a},
 5 -NR¹¹C(=O)NR¹¹R^{11a}, -NR¹¹SO₂NR¹¹R^{11a}, -NR¹¹SO₂R^{11a};
 C₁-C₄ alkyl substituted with 0-2 R^{4b};
 C₂-C₄ alkenyl substituted with 0-2 R^{4b};
 C₂-C₄ alkynyl substituted with 0-2 R^{4b};
 C₃-C₇ cycloalkyl substituted with 0-3 R^{4c};
 10 aryl substituted with 0-5 R^{4c}; and
 5-10 membered heterocyclic group consisting of carbon
 atoms and 1-4 heteroatoms selected from the
 group: O, S, and N; optionally saturated,
 partially unsaturated or unsaturated; and said 5-
 15 10 membered heterocyclic group is substituted
 with 0-3 R^{4c};

R^{4b} is, at each occurrence, independently selected from:
 H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH,
 20 -CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a},
 -NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},
 -S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a}, -NHC(=NH)NHR¹¹,
 -C(=NH)NHR¹¹, =NOR¹¹, -NR¹¹C(=O)OR^{11a},
 -OC(=O)NR¹¹R^{11a}, -NR¹¹C(=O)NR¹¹R^{11a}, -NR¹¹SO₂NR¹¹R^{11a},
 25 -NR¹¹SO₂R^{11a}, -OP(O)(OR¹¹)₂;
 C₁-C₄ alkyl substituted with 0-3 R^{4c};
 C₂-C₄ alkenyl substituted with 0-3 R^{4c};
 C₂-C₄ alkynyl substituted with 0-3 R^{4c};
 C₃-C₆ cycloalkyl substituted with 0-4 R^{4d};

aryl substituted with 0-5 R^{4d}; and
5-10 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated or
5 unsaturated; and said 5-10 membered heterocyclic
group is substituted with 0-3 R^{4d};

R^{4c} is, at each occurrence, independently selected from:

H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH,
10 -CO₂H, -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a},
-NHC(=O)R¹¹, -NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},
-S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a},
C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy;
C₁-C₄ alkyl substituted with 0-3 R^{4d};
15 C₂-C₄ alkenyl substituted with 0-3 R^{4d};
C₂-C₄ alkynyl substituted with 0-3 R^{4d};
C₃-C₆ cycloalkyl substituted with 0-4 R^{4d};
aryl substituted with 0-5 R^{4d}; and
5-10 membered heterocyclic group consisting of carbon
20 atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated or
unsaturated; and said 5-10 membered heterocyclic
group is substituted with 0-3 R^{4d};

25 R^{4d} is, at each occurrence, independently selected from:

H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH,
-CO₂H, -CO₂R¹¹, -C(=O)NR¹¹R^{11a}, -NHC(=O)R¹¹,
-NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a}, -S(=O)R^{11a},
-SO₂R¹¹, -SO₂NR¹¹R^{11a}, C₁-C₄ alkyl, C₁-C₄ alkoxy,
30 C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy, phenyl, and benzyl;

R^{9a} is selected from the group: H, -S(=O)R^{9b}, -S(=O)₂R^{9b},
-S(=O)₂NHR^{9b}, -C(=O)R^{9b}, -C(=O)OR^{9b}, -C(=O)NHR^{9b},
-C(=O)NHC(=O)R^{9b};

- 5 C₁-C₄ alkyl substituted with 0-3 R^{9c};
C₂-C₄ alkenyl substituted with 0-3 R^{9c};
C₂-C₄ alkynyl substituted with 0-3 R^{9c};
C₃-C₆ cycloalkyl substituted with 0-3 R^{9d};
C₃-C₁₄ carbocycle substituted with 0-4 R^{9d};
10 aryl substituted with 0-5 R^{9d}; and
5-10 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the group:
O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
15 heterocyclic group is substituted with 0-4 R^{9d};

R^{9b} is selected from the group: H;

- C₁-C₄ alkyl substituted with 0-2 R^{9c};
C₂-C₄ alkenyl substituted with 0-2 R^{9c};
20 C₂-C₄ alkynyl substituted with 0-2 R^{9c};
C₃-C₆ cycloalkyl substituted with 0-2 R^{9d};
C₃-C₁₄ carbocycle substituted with 0-3 R^{9d};
aryl substituted with 0-3 R^{9d}; and
5-10 membered heterocyclic group consisting of carbon
25 atoms and 1-4 heteroatoms selected from the group:
O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
heterocyclic group is substituted with 0-3 R^{9d};

- R^{9c} is selected from the group: CF_3 , OCF_3 , Cl, F, Br, I, $=O$, OH, $C(O)OR^{11}$, NH_2 , $NH(CH_3)$, $N(CH_3)_2$, $-CN$, NO_2 ;
C₁-C₄ alkyl substituted with 0-3 R^{9d} ;
C₂-C₄ alkenyl substituted with 0-3 R^{9d} ;
5 C₂-C₄ alkynyl substituted with 0-3 R^{9d} ;
C₃-C₆ cycloalkyl substituted with 0-3 R^{9e} ;
C₃-C₁₄ carbocycle substituted with 0-4 R^{9e} ;
aryl substituted with 0-5 R^{9e} ; and
5-10 membered heterocyclic group consisting of carbon
10 atoms and 1-4 heteroatoms selected from the group:
O, S, and N; optionally saturated, partially
unsaturated or unsaturated; and said 5-10 membered
heterocyclic group is substituted with 0-4 R^{9e} ;
- 15 R^{9d} is selected at each occurrence from the group:
 CF_3 , OCF_3 , Cl, F, Br, I, $=O$, OH, $C(O)OR^{11}$, NH_2 ,
 $NH(CH_3)$, $N(CH_3)_2$, $-CN$, NO_2 ;
C₁-C₄ alkyl substituted with 0-3 R^{9e} ;
C₁-C₄ alkoxy substituted with 0-3 R^{9e} ;
20 C₃-C₆ cycloalkyl substituted with 0-3 R^{9e} ;
aryl substituted with 0-5 R^{9e} ; and
5-6 membered heterocyclic group consisting of carbon
atoms and 1-4 heteroatoms selected from the
group: O, S, and N; optionally saturated,
25 partially unsaturated or unsaturated; and said
5-6 membered heterocyclic group is substituted
with 0-4 R^{9e} ;

R^{9e} is selected at each occurrence from the group:

C₁-C₄ alkyl, C₁-C₄ alkoxy, CF₃, OCF₃, Cl, F, Br, I,
=O, OH, phenyl, C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂,
-CN, and NO₂;

5 R¹¹ and R^{11a} are, at each occurrence, independently
selected from the group: H;

C₁-C₄ alkyl substituted with 0-1 R^{11b};

phenyl substituted with 0-2 R^{11b}; and

benzyl substituted with 0-2 R^{11b};

10

R^{11b} is OH, C₁-C₄ alkoxy, F, Cl, Br, I, NH₂, or -NH(C₁-C₄
alkyl);

OR²⁶ and OR²⁷ are independently selected from:

15

a) -OH,

d) C₁-C₈ alkoxy, and

when taken together, OR²⁶ and OR²⁷ form:

e) a cyclic boronic ester where said cyclic boronic
ester contains from 2 to 16 carbon atoms;

20

A³, A⁴, and A⁵, are independently selected from an amino
acid residue wherein said amino acid residue, at each
occurrence, is independently selected from the group:

25

Ala, Arg, Asn, Asp, Aze, Cys, Gln, Glu, Gly, His, Hyp,
Ile, Leu, Lys, Met, Orn, Phe, Pro, Sar, Ser, Thr, Trp,
Tyr, Val, Abu, Alg, Ape, Cha, Cpa, Cpg, Dfb, Dpa, Gla,
Irg, HomoLys, Phe(4-fluoro), Tpa, Asp(OMe), Glu(OMe),
Hyp(OMe), Asp(O^tBu), Glu(O^tBu), Hyp(O^tBu), Thr(O^tBu),
Asp(OBzl), Glu(OBzl), Hyp(OBzl), Pro(OBzl), Thr(OBzl),
30 cyclohexylglycine, cyclohexylalanine,

cyclopropylglycine, t-butylglycine, phenylglycine, and 3,3-diphenylalanine.

4. A compound of Claim 3, or a stereoisomer,
5 pharmaceutically acceptable salt form or prodrug thereof,
wherein:

A¹ is -CH₂-;

- 10 A² is -C(=O)R^{9b}, -S(=O)R^{9b}, -S(=O)₂R^{9b}, -CONHR^{9b},
-S(=O)₂NHR^{9b}, -C(=O)OR^{9b};
-A³-R^{9a};
-A³-A⁴-R^{9a}; or
-A³-A⁴-A⁵-R^{9a};

- 15 W is -B(OR²⁶)(OR²⁷);

R¹ is selected from the group: H;

- C₁-C₄ alkyl substituted with 0-2 R^{1a};
20 C₂-C₄ alkenyl substituted with 0-2 R^{1a};
C₂-C₄ alkynyl substituted with 0-2 R^{1a};

R^{1a} is selected at each occurrence from the group:

- Cl, F, Br, CF₃, or CHF₂;

25

R² is H or methyl;

R³ is selected from the group: R⁴,

- (CH₂)_p-NH-R⁴,
30 -(CH₂)_p-NHC(=O)-R⁴,

$-(CH_2)_p-C(=O)NH-R^4,$
 $-(CH_2)_p-C(=O)O-R^4,$
 $-(CH_2)_p-NHC(=O)NH-R^4,$
 $-(CH_2)_p-NHC(=O)NHC(=O)-R^4,$
5 $-(CH_2)_p-C(=O)-R^4,$
 $-(CH_2)_p-O-R^4,$ and
 $-(CH_2)_p-S-R^4;$

p is 0 or 1;

10

R^4 is selected from the group:

C_1-C_4 alkyl substituted with 0-3 R^{4a} ;
 C_2-C_4 alkenyl substituted with 0-3 R^{4a} ;
 C_2-C_4 alkynyl substituted with 0-3 R^{4a} ;
15 C_3-C_4 cycloalkyl substituted with 0-2 R^{4b} ;
phenyl substituted with 0-3 R^{4b} ;
naphthyl substituted with 0-3 R^{4b} ; and
5-10 membered heterocyclic group selected from the
group: pyridinyl, furanyl, thienyl, pyrrolyl,
20 pyrazolyl, pyrazinyl, piperazinyl, imidazolyl,
indolyl, benzimidazolyl, 1H-indazolyl,
oxazolidinyl, benzotriazolyl, benzisoxazolyl,
benzoxazolyl, oxindolyl, benzoxazolinyl,
benzthiazolyl, benzisothiazolyl, isatinoyl,
25 isoxazolopyridinyl, isothiazolopyridinyl,
thiazolopyridinyl, oxazolopyridinyl,
imidazolopyridinyl, pyrazolopyridinyl,
4H-quinolizinyl, benzofuranyl, benzothiophenyl,
quinazolinyl, quinolinyl, 4H-quinolizinyl, and

quinoxaliny1; and said 5-10 membered heterocyclic group is substituted with 0-3 R^{4b};

R^{4a} is, at each occurrence, independently selected from:

5 H, F, Cl, Br, -NO₂, -CN, -CF₃, -OCF₃, OH, -CO₂H,
-C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a}, -NHC(=O)R¹¹,
-NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a}, -S(=O)R^{11a},
-SO₂R¹¹, -SO₂NR¹¹R^{11a}, -NR¹¹C(=O)NR¹¹R^{11a},
-NR¹¹SO₂R^{11a};

10 C₁-C₄ alkyl substituted with 0-2 R^{4b};

phenyl substituted with 0-3 R^{4c};

naphthyl substituted with 0-3 R^{4c}; and

5-10 membered heterocyclic group selected from the

group: pyridiny1, furany1, thieny1, pyrroly1,
15 pyrazoly1, pyraziny1, piperaziny1, imidazoly1,
indoly1, benzimidazoly1, 1H-indazoly1,

oxazolidiny1, benzotriazoly1, benzisoxazoly1,
benzoxazoly1, oxindoly1, benzoxazolinyl,

benzthiazoly1, benzisothiazoly1, isatinoy1,

20 isoxazolopyridiny1, isothiazolopyridiny1,

thiazolopyridiny1, oxazolopyridiny1,

imidazolopyridiny1, pyrazolopyridiny1,

4H-quinoliziny1, benzofurany1, benzothiophenyl,

quinazolinyl, quinolinyl, 4H-quinoliziny1, and

25 quinoxaliny1; and said 5-10 membered heterocyclic

group is substituted with 0-3 R^{4c};

R^{4b} is, at each occurrence, independently selected from:

H, F, Cl, Br, -NO₂, -CN, -CF₃, -OCF₃, OH, -CO₂H,
30 -C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a}, -NHC(=O)R¹¹,
-NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a}, -S(=O)R^{11a},

-SO₂R¹¹, -SO₂NR¹¹R^{11a}, -NR¹¹C(=O)NR¹¹R^{11a},
-NR¹¹SO₂R^{11a};

C₁-C₄ alkyl substituted with 0-1 R^{4c};

phenyl substituted with 0-3 R^{4d};

5 naphthyl substituted with 0-3 R^{4d}; and

5-10 membered heterocyclic group selected from the

group: pyridinyl, furanyl, thienyl, pyrrolyl,

pyrazolyl, pyrazinyl, piperazinyl, imidazolyl,

indolyl, benzimidazolyl, 1*H*-indazolyl,

10 oxazolidinyl, benzotriazolyl, benzisoxazolyl,

benzoxazolyl, oxindolyl, benzoxazolinyl,

benzthiazolyl, benzisothiazolyl, isatinoyl,

isoxazolopyridinyl, isothiazolopyridinyl,

thiazolopyridinyl, oxazolopyridinyl,

15 imidazolopyridinyl, pyrazolopyridinyl,

4*H*-quinolizinyl, benzofuranyl, benzothiophenyl,

quinazolinyl, quinolinyl, 4*H*-quinolizinyl, and

quinoxalinyl; and said 5-10 membered heterocyclic

group is substituted with 0-3 R^{4d};

20

R^{4c} is, at each occurrence, independently selected from:

H, F, Cl, Br, -NO₂, -CN, -CF₃, -OCF₃, OH, -CO₂H,

-C(=NH)NH₂, -CO₂R¹¹, -C(=O)NR¹¹R^{11a}, -NHC(=O)R¹¹,

-NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a},

25 -S(=O)R^{11a}, -SO₂R¹¹, -SO₂NR¹¹R^{11a},

C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy and C₁-C₄ alkyl;

R^{4d} is, at each occurrence, independently selected from:

H, F, Cl, Br, I, -NO₂, -CN, -NCS, -CF₃, -OCF₃, =O, OH,

30 -CO₂H, -CO₂R¹¹, -C(=O)NR¹¹R^{11a}, -NHC(=O)R¹¹,

-NR¹¹R^{11a}, -OR^{11a}, -SR^{11a}, -C(=O)R^{11a}, -S(=O)R^{11a},

-SO₂R¹¹, -SO₂NR¹¹R^{11a}, C₁-C₄ alkyl, C₁-C₄ alkoxy,
C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy, phenyl, and benzyl;

R^{9a} is selected from the group: H, -S(=O)R^{9b}, -S(=O)₂R^{9b},

5 -S(=O)₂NHR^{9b}, -C(=O)R^{9b}, -C(=O)OR^{9b}, -C(=O)NHR^{9b},
 -C(=O)NHC(=O)R^{9b};

C₁-C₄ alkyl substituted with 0-2 R^{9c};

C₃-C₁₂ carbocycle substituted with 0-3 R^{9d};

phenyl substituted with 0-3 R^{9d};

10 naphthyl substituted with 0-3 R^{9d}; and

5-10 membered heterocyclic group selected from the
 group: pyridinyl, furanyl, thienyl, pyrrolyl,
 pyrazolyl, pyrazinyl, piperazinyl, imidazolyl,
 indolyl, benzimidazolyl, 1H-indazolyl,

15 oxazolidinyl, benzotriazolyl, benzisoxazolyl,
 benzoxazolyl, oxindolyl, benzoxazolinyl,
 benzthiazolyl, benzisothiazolyl, isatinoyl,
 isoxazolopyridinyl, isothiazolopyridinyl,
 thiazolopyridinyl, oxazolopyridinyl,

20 imidazolopyridinyl, pyrazolopyridinyl,
 4H-quinolizinyl, benzofuranyl, benzothiophenyl,
 quinazolinyl, quinolinyl, 4H-quinolizinyl, and
 quinoxalinyl; and said 5-10 membered heterocyclic
 group is substituted with 0-3 R^{9d};

25

R^{9b} is selected from the group: H;

C₁-C₄ alkyl substituted with 0-1 R^{9c};

C₂-C₄ alkenyl substituted with 0-1 R^{9c};

C₂-C₄ alkynyl substituted with 0-1 R^{9c};

30 C₃-C₁₂ carbocycle substituted with 0-3 R^{9d};

phenyl substituted with 0-3 R^{9d};
 naphthyl substituted with 0-3 R^{9d}; and
 5-10 membered heterocyclic group selected from the
 group: pyridinyl, furanyl, thienyl, pyrrolyl,
 5 pyrazolyl, pyrazinyl, piperazinyl, imidazolyl,
 indolyl, benzimidazolyl, 1H-indazolyl,
 oxazolidinyl, benzotriazolyl, benzisoxazolyl,
 benzoxazolyl, oxindolyl, benzoxazolinyl,
 benzthiazolyl, benzisothiazolyl, isatinoyl,
 10 isoxazolopyridinyl, isothiazolopyridinyl,
 thiazolopyridinyl, oxazolopyridinyl,
 imidazolopyridinyl, pyrazolopyridinyl,
 4H-quinolizinyl, benzofuranyl, benzothiophenyl,
 quinazolinyl, quinolinyl, 4H-quinolizinyl, and
 15 quinoxalinyl; and said 5-10 membered heterocyclic
 group is substituted with 0-3 R^{9d};

R^{9c} is selected from the group: CF₃, OCF₃, Cl, F, Br, OH,
 C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂, -CN, NO₂;

20 C₁-C₄ alkyl substituted with 0-2 R^{9d};
 C₂-C₄ alkenyl substituted with 0-2 R^{9d};
 C₂-C₄ alkynyl substituted with 0-2 R^{9d};
 C₃-C₆ cycloalkyl substituted with 0-2 R^{9e};
 C₃-C₁₂ carbocycle substituted with 0-3 R^{9e};

25 phenyl substituted with 0-3 R^{9e};
 naphthyl substituted with 0-3 R^{9e}; and
 5-10 membered heterocyclic group selected from the
 group: pyridinyl, furanyl, thienyl, pyrrolyl,
 pyrazolyl, pyrazinyl, piperazinyl, imidazolyl,
 30 indolyl, benzimidazolyl, 1H-indazolyl,
 oxazolidinyl, benzotriazolyl, benzisoxazolyl,

benzoxazolyl, oxindolyl, benzoxazolinyl,
benzthiazolyl, benzisothiazolyl, isatinoyl,
isoxazolopyridinyl, isothiazolopyridinyl,
thiazolopyridinyl, oxazolopyridinyl,
5 imidazolopyridinyl, pyrazolopyridinyl,
4H-quinoliziny, benzofuranyl, benzothiophenyl,
quinazolinyl, quinolinyl, 4H-quinoliziny, and
quinoxalinyl; and said 5-10 membered heterocyclic
group is substituted with 0-3 R^{9e};

10

R^{9d} is selected at each occurrence from the group:

CF₃, OCF₃, Cl, F, Br, OH, C(O)OR¹¹, NH₂, NH(CH₃),
N(CH₃)₂, -CN, NO₂, C₁-C₄ alkyl, C₁-C₄ alkoxy, and
phenyl;

15

R^{9e} is selected at each occurrence from the group:

C₁-C₄ alkyl, C₁-C₄ alkoxy, CF₃, OCF₃, Cl, F, Br, I,
=O, OH, phenyl, C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂,
-CN, and NO₂;

20

R¹¹ and R^{11a} are, at each occurrence, independently
selected from the group: H, methyl, ethyl, propyl,
butyl, phenyl and benzyl;

25 OR²⁶ and OR²⁷ are independently selected from:

a) -OH,
d) C₁-C₈ alkoxy, and

when taken together, OR²⁶ and OR²⁷ form:

30 e) a cyclic boronic ester where said cyclic boronic
ester is formed from the group: pinanediol,
pinacol, 1,2-ethanediol, 1,3-propanediol, 1,2-
propanediol, 2,3-butanediol, 1,2-

diisopropylethanedio, 5,6-decanediol, 1,2-dicyclohexylethanol, diethanolamine, and 1,2-diphenyl-1,2-ethanediol;

5 A^3 is Val, Glu, Ile, Thr, cyclohexylglycine, or cyclohexylalanine;

A^4 is Val, Ile, Leu, cyclohexylglycine, cyclopropylglycine, t-butylglycine, phenylglycine, or 3,3-
10 diphenylalanine; and

A^5 is (D or L stereochemistry) Asp, Glu, Val, Ile, t-butylglycine, and Gla.

15 5. A compound of Claim 4, or a stereoisomer, pharmaceutically acceptable salt form or prodrug thereof, wherein:

20 A^1 is $-CH_2-$;

A^2 is H, $-C(=O)R^{9b}$, $-CONHR^{9b}$, $-C(=O)OR^{9b}$,
 $-A^3-R^{9a}$; or
 $-A^3-A^4-R^{9a}$;

25 W is pinanediol boronic ester;

R^1 is H, ethyl, allyl, or 2,2-difluoro-ethyl;

30 R^2 is H;

R^3 is selected from the group: R^4 ,

- (CH₂)_p-NH-R⁴,
- (CH₂)_p-NHC(=O)-R⁴,
- (CH₂)_p-C(=O)NH-R⁴,
- (CH₂)_p-C(=O)O-R⁴,
- 5 - (CH₂)_p-NHC(=O)NH-R⁴,
- (CH₂)_p-NHC(=O)NHC(=O)-R⁴,
- (CH₂)_p-C(=O)-R⁴,
- (CH₂)_p-O-R⁴, and
- (CH₂)_p-S-R⁴;

10

p is 0 or 1;

- R⁴ is selected from the group: H, methyl, isopropyl, t-butyl, phenyl, benzyl, phenethyl, Ph-propyl, 3-Ph-2-propenyl, phenyl, 2-benzoic acid, 5-isophthalate
- 15 dimethyl ester, triphenylmethyl, 1-(1-naphthyl)ethyl, 2-methylphenyl, 4-methylphenyl, 4-ethylphenyl, 2-isopropylphenyl, 4-isopropylphenyl, 4-tert-butylphenyl, 2-methoxyphenyl, 3-methoxyphenyl, 4-methoxyphenyl, 2-ethoxyphenyl, 4-ethoxyphenyl, 2-F-phenyl, 3-F-phenyl, 4-F-phenyl, 2-Cl-phenyl, 4-Cl-phenyl, 2-CF₃-phenyl, 3-CF₃-phenyl, 4-CF₃-phenyl, 4-(trifluoromethoxy)phenyl, 4-(hydroxymethyl)phenyl, 3-cyanophenyl, 3-(acetyl)phenyl, 2-phenoxyphenyl, 3-phenoxyphenyl, 4-(acetyl)phenyl, 2-(methoxycarbonyl)-phenyl, 3-(methoxycarbonyl)-phenyl,
- 25 4-(methoxycarbonyl)-phenyl, 2-(ethoxycarbonyl)-phenyl, 3-(ethoxycarbonyl)-phenyl, 4-(ethoxycarbonyl)phenyl, 2-(butoxycarbonyl)phenyl, 2-(tert-butoxycarbonyl)phenyl, 4-(dimethylamino)phenyl, 2-(methylthio)phenyl, 3-(methylthio)phenyl, 4-(methylthio)phenyl, 2-(methylsulfonyl)phenyl, 3-CF₃S-phenyl, 2-nitrophenyl, 4-
- 30

nitrophenyl, 2-aminophenyl, 4-(benzyloxy)phenyl, 2-biphenyl, 4-biphenyl, 2,6-diisopropylphenyl, 2,4-diF-phenyl, 2,5-diF-phenyl, 2,6-diF-phenyl, 3,4-dichlorophenyl, 2,4-dimethoxyphenyl, 2,5-dimethoxyphenyl, 5-Cl-2-methoxyphenyl, 4-F-2-nitrophenyl, 3,4,5,-trimethoxyphenyl, 5-Cl-2,4-dimethoxyphenyl, 5-F-2,4-dimethoxyphenyl, Trans-2-phenylcyclopropyl, 1-naphthyl, 2-naphthyl, 2-pyridinyl, 3-pyridinyl, 2-quinolinyl, 5-quinolinyl, 1-isoquinolinyl, 2-phenyl-4-quinolinyl, 2-phenyl-4-quinolinyl-methyl, 2-methyl-6-quinolinyl, 2-anilino-2-oxoethyl and 2-3-methylbutyric acid methyl ester;

R^{9a} is selected from the group: H, $-S(=O)R^{9b}$, $-S(=O)_2R^{9b}$, $-S(=O)_2NHR^{9b}$, $-C(=O)R^{9b}$, $-C(=O)OR^{9b}$, $-C(=O)NHR^{9b}$, $-C(=O)NHC(=O)R^{9b}$;
C₁-C₄ alkyl substituted with 0-2 R^{9c} ;
C₃-C₁₂ carbocycle substituted with 0-2 R^{9d} ;
phenyl substituted with 0-2 R^{9d} ;
naphthyl substituted with 0-2 R^{9d} ; and
5-10 membered heterocyclic group selected from the group: pyridinyl, furanyl, thienyl, pyrrolyl, pyrazolyl, pyrazinyl, piperazinyl, imidazolyl, indolyl, benzimidazolyl, 1H-indazolyl, oxazolidinyl, benzotriazolyl, benzisoxazolyl, benzoxazolyl, oxindolyl, benzoxazolinyl, benzthiazolyl, benzisothiazolyl, isatinoyl, isoxazolopyridinyl, isothiazolopyridinyl, thiazolopyridinyl, oxazolopyridinyl, imidazolopyridinyl, pyrazolopyridinyl, 4H-quinoliziny, benzofuranyl, benzothiophenyl, quinazoliny, quinolinyl, 4H-quinoliziny, and

quinoxaliny1; and said 5-10 membered heterocyclic group is substituted with 0-2 R^{9d};

R^{9b} is selected from the group: H;

- 5 C₁-C₄ alkyl substituted with 0-1 R^{9c};
C₃-C₁₂ carbocycle substituted with 0-2 R^{9d};
phenyl substituted with 0-2 R^{9d};
naphthyl substituted with 0-2 R^{9d}; and
5-10 membered heterocyclic group selected from the
10 group: pyridinyl, furanyl, thienyl, pyrrolyl, pyrazolyl, pyrazinyl, piperazinyl, imidazolyl, indolyl, benzimidazolyl, 1H-indazolyl, oxazolidinyl, benzotriazolyl, benzisoxazolyl, benzoxazolyl, oxindolyl, benzoxazoliny1,
15 benzthiazolyl, benzisothiazolyl, isatinoyl, isoxazolopyridinyl, isothiazolopyridinyl, thiazolopyridinyl, oxazolopyridinyl, imidazolopyridinyl, pyrazolopyridinyl, 4H-quinoliziny1, benzofuranyl, benzothiophenyl,
20 quinazoliny1, quinoliny1, 4H-quinoliziny1, and quinoxaliny1; and said 5-10 membered heterocyclic group is substituted with 0-2 R^{9d};

R^{9c} is selected from the group: CF₃, OCF₃, Cl, F, Br, OH,

- 25 C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂, -CN, NO₂;
C₁-C₄ alkyl substituted with 0-1 R^{9d};
C₂-C₄ alkenyl substituted with 0-1 R^{9d};
C₂-C₄ alkynyl substituted with 0-1 R^{9d}; and

- 30 R^{9d} is selected at each occurrence from the group:

CF₃, OCF₃, Cl, F, Br, OH, C(O)OR¹¹, NH₂, NH(CH₃),
N(CH₃)₂, -CN, NO₂, C₁-C₄ alkyl, C₁-C₄ alkoxy, and
phenyl;

5 R¹¹ is selected from the group: H, methyl, ethyl, propyl,
butyl, phenyl and benzyl;

A³ is Val, Glu, Ile, Thr, cyclohexylglycine, or
cyclohexylalanine; and

10

A⁴ is Val, Ile, Leu, cyclohexylglycine,
cyclopropylglycine, t-butylglycine, phenylglycine, or 3,3-
diphenylalanine.

15 6. A compound of Claim 5, or a stereoisomer,
pharmaceutically acceptable salt form or prodrug thereof,
wherein:

A¹ is -CH₂-;

20

A² is -C(=O)OR^{9b} or -A³-R^{9a};

W is pinanediol boronic ester;

25 R¹ is H, ethyl or allyl;

R² is H;

R³ is R⁴;

30

R⁴ is selected from the group: Ph-propyl, 3-Ph-2-propenyl, 2-phenyl-4-quinolinyl, 2-phenyl-4-quinolinyl-methyl, 2-methyl-6-quinolinyl, and 2-anilino-2-oxoethyl;

- 5 R^{9a} is selected from the group: -S(=O)₂R^{9b}, -C(=O)R^{9b}, -C(=O)OR^{9b}, and -C(=O)NHR^{9b};

R^{9b} is selected from the group: t-butyl, fluorenylmethyl, fluorenyl, benzyl;

- 10 phenyl substituted with 0-2 R^{9d};
naphthyl substituted with 0-2 R^{9d}; and
pyridinyl substituted with 0-2 R^{9d};

R^{9d} is selected at each occurrence from the group:

- 15 CF₃, OCF₃, Cl, F, Br, OH, C(O)OR¹¹, NH₂, NH(CH₃), N(CH₃)₂, -CN, NO₂, C₁-C₄ alkyl, C₁-C₄ alkoxy, and phenyl; and

A³ is Val.

20

7. A compound of Claim 1, or a stereoisomer or a pharmaceutically acceptable salt form or prodrug thereof, selected from:

- 25 (4*S*)-*N*-{[[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl}-3-{(2*S*)-3-methyl-2-[(phenylacetyl)-amino]-butanoyl}-2-oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

30

tert-butyl (1*S*)-*N*-{[[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl]amino)carbonyl]-2-oxo-3-(3-phenylpropyl)imidazolidinyl]carbonyl}-2-methylpropylcarbamate;

(4*S*)-*N*-{[[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl]-3-[(2*S*)-2-[(anilinocarbonyl)amino]-3-methylbutanoyl]-2-oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

(4*S*)-*N*-{[[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl]-3-[(2*S*)-2-[(9*H*-fluoren-1-ylcarbonyl)amino]-3-methylbutanoyl]-2-oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

(4*S*)-*N*-{[[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl]-3-[(2*S*)-2-[(4-methoxyphenyl)acetyl]amino]-3-methylbutanoyl]-2-oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

(4*S*)-*N*-{[[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]-3-butenyl]-3-[(2*S*)-2-[(9*H*-fluoren-1-ylcarbonyl)amino]-3-methylbutanoyl]-2-oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

9*H*-fluoren-9-ylmethyl (1*S*)-*N*-{[[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-trimethyl-4, 6-methano-1, 3, 2-

benzodioxaborol-2-yl]propyl}amino)carbonyl]-2-oxo-3-(3-phenylpropyl)imidazolidinyl}carbonyl}-2-methylpropylcarbamate;

5 (4*S*)-*N*-{[[(1*R*)-1-[(3 α *S*, 4*S*, 6*S*, 7 α *R*)-hexahydro-3 α , 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl}-3-((2*S*)-3-methyl-2-{[3-(trifluoromethyl)benzyl]amino}butanoyl)-2-oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

10 (4*S*)-*N*-{[[(1*R*)-1-[(3 α *S*, 4*S*, 6*S*, 7 α *R*)-hexahydro-3 α , 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl}-3-((2*S*)-2-[[[1, 1'-biphenyl]-4-ylmethyl)amino]-3-methylbutanoyl)-2-oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

15 9*H*-fluoren-9-ylmethyl (1*S*)-1-((5*S*)-5-[[(1*R*)-1-[(3 α *S*, 4*S*, 6*S*, 7 α *R*)-hexahydro-3 α , 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl}amino)carbonyl]-2-oxo-3-[(2-phenyl-4-quinolinyl)methyl]imidazolidinyl}carbonyl)-2-methylpropylcarbamate;

20 25 *N*-((1*S*)-1-[(5*S*)-5-[[(1*R*)-1-[(3 α *S*, 4*S*, 6*S*, 7 α *R*)-hexahydro-3 α , 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl}-amino)carbonyl]-2-oxo-3-(3-phenylpropyl)imidazolidinyl}carbonyl)-2-methylpropyl)-2-chloronicotinamide;

30 (4*S*)-*N*-{[[(1*R*)-1-[(3 α *S*, 4*S*, 6*S*, 7 α *R*)-hexahydro-3 α , 5, 5-trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-yl]propyl}-3-((2*S*)-2-[(4-butylbenzoyl)amino]-3-

methylbutanoyl}-2-oxo-1-(3-phenylpropyl)-4-
imidazolidinecarboxamide;

isobutyl (1*S*)-1-{[(5*S*)-5-{[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-
5 hexahydro-3*α*, 5, 5-trimethyl-4, 6-methano-1, 3, 2-
benzodioxaborol-2-yl]propyl}amino)carbonyl]-2-oxo-3-(3-
phenylpropyl)imidazolidinyl]carbonyl}-2-
methylpropylcarbamate;

10 (4*S*)-*N*-{[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-
trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-
yl]propyl}-3-[(2*S*)-2-{[(benzoylamino)carbonyl]amino}-3-
methylbutanoyl]-2-oxo-1-(3-phenylpropyl)-4-
imidazolidinecarboxamide;

15 (4*S*)-*N*-{[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-
trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-
yl]propyl}-3-[(2*S*)-3-methyl-2-(1-
naphthoylamino)butanoyl]-2-oxo-1-(3-phenylpropyl)-4-
20 imidazolidinecarboxamide;

(4*S*)-*N*-{[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-
trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-
yl]propyl}-3-[(2*S*)-2-(acetylamino)-3-methylbutanoyl]-2-
25 oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

(4*S*)-*N*-{[(1*R*)-1-[(3*αS*, 4*S*, 6*S*, 7*αR*)-hexahydro-3*α*, 5, 5-
trimethyl-4, 6-methano-1, 3, 2-benzodioxaborol-2-
yl]propyl}-3-[(2*S*)-2-(benzoylamino)-3-methylbutanoyl]-2-
30 oxo-1-(3-phenylpropyl)-4-imidazolidinecarboxamide;

benzyl (5S)-5-[(1R)-1-[(3 α S,4S,6S,7 α R)-hexahydro-3 α ,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-butenyl]amino)carbonyl]-2-oxo-3-[(2E)-3-phenyl-2-propenyl]-1-imidazolidinecarboxylate; and

5

benzyl (5S)-5-[(1R)-1-[(3 α S,4S,6S,7 α R)-hexahydro-3 α ,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-butenyl]amino)carbonyl]-3-(2-anilino-2-oxoethyl)-2-oxo-1-imidazolidinecarboxylate.

10

87. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 1, or a pharmaceutically acceptable salt form or prodrug thereof.

88. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 2, or a pharmaceutically acceptable salt form or prodrug thereof.

89. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 3, or a pharmaceutically acceptable salt form or prodrug thereof.

90. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of Claim 4, or a pharmaceutically acceptable salt form or prodrug thereof.

91. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically

effective amount of a compound of Claim 5, or a
pharmaceutically acceptable salt form or prodrug thereof.

13. A pharmaceutical composition comprising a
5 pharmaceutically acceptable carrier and a therapeutically
effective amount of a compound of Claim 6, or a
pharmaceutically acceptable salt form or prodrug thereof.

14. A pharmaceutical composition comprising a
10 pharmaceutically acceptable carrier and a therapeutically
effective amount of a compound of Claim 7, or a
pharmaceutically acceptable salt form or prodrug thereof.

15. A method of treating a viral infection which comprises
15 administering to a host in need of such treatment a
therapeutically effective amount of a compound of Claim 1,
or a pharmaceutically acceptable salt form or prodrug
thereof.

16. A method of treating HCV infection which comprises
20 administering to a host in need of such treatment a
therapeutically effective amount of a compound of Claim 1,
or a pharmaceutically acceptable salt form or prodrug
thereof.

25 17. A method of treating HCV infection which comprises
administering to a host in need of such treatment a
therapeutically effective amount of a compound of Claim 2,
or a pharmaceutically acceptable salt form or prodrug
30 thereof.

18. A method of treating HCV infection which comprises
administering to a host in need of such treatment a

therapeutically effective amount of a compound of Claim 3,
or a pharmaceutically acceptable salt form or prodrug
thereof.

5 1918. A method of treating HCV infection which comprises
administering to a host in need of such treatment a
therapeutically effective amount of a compound of Claim 4,
or a pharmaceutically acceptable salt form or prodrug
thereof.

10

20 1919. A method of treating HCV infection which comprises
administering to a host in need of such treatment a
therapeutically effective amount of a compound of Claim 5,
or a pharmaceutically acceptable salt form or prodrug
15 thereof.

20 20. A method of treating HCV infection which comprises
administering to a host in need of such treatment a
therapeutically effective amount of a compound of Claim 6,
or a pharmaceutically acceptable salt form or prodrug
20 thereof.

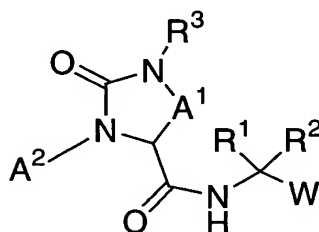
25 21. A method of treating HCV infection which comprises
administering to a host in need of such treatment a
therapeutically effective amount of a compound of Claim 7,
or a pharmaceutically acceptable salt form or prodrug
thereof.

TITLE

Imidazolidinones and Their Related Derivatives as
Hepatitis C Virus NS3 Protease Inhibitors

FIELD OF THE INVENTION

The present invention relates generally to a novel
class of imidazolidinones of Formula (I):



(I)

that are useful as serine protease inhibitors, and more
particularly as Hepatitis C virus NS3 protease inhibitors.
This invention also relates to pharmaceutical compositions
comprising these compounds and methods of using the same.